

## CLAIMS

What is claimed is:

1 1. A method of supporting an H.323 call using an H.323 system, the H.323 system  
2 including a first device and a second device, the first device coupled in communication  
3 with the second device, the first device having a first H.323 port, the method comprising:  
4 responsive to receiving a first admission request on the first device, the first  
5 admission request corresponding to a request from an H.323 terminal,  
6 transmitting a second admission request for the H.323 call from the first device  
7 to the second device;  
8 responsive to transmitting the second admission request, receiving an admission  
9 confirmation for the H.323 call from the second device at the first device, the  
10 admission confirmation indicating that the call can proceed;  
11 storing a call state information on the first device, the call state information  
12 corresponding to a state of the H.323 call; and  
13 updating the call state information on the first device after receiving the admission  
14 confirmation.

1 2. The method of claim 1, further comprising:  
2 responsive to receiving one of a registration request and a status request associated  
3 with the H.323 call on the first device, transmitting the corresponding request  
4 from the first device to the second device;  
5 responsive to transmitting the corresponding request, receiving a response to the  
6 corresponding request from the second device on the first device; and  
7 updating the call status information on the first device after receiving the response.

1 3. The method of claim 2 further comprising responsive to receiving the response,  
2 transmitting the response from the first device to the H.323 terminal.

1 4. The method of claim 1, wherein if a failure in the second device occurs, the H.323  
2 call continues uninterrupted.

1 5. The method of claim 4, wherein the H.323 system includes a third device coupled  
2 in communication with the first device, and the method further comprising:

3 receiving a message from the third device at the first device, the message  
4 indicating the failure in the second device;  
5 updating the call state information after receiving the message;  
6 using the third device to support at least one of a registration request, an admission  
7 request, and a status request associated with the H.323 call; and  
8 updating the call status information on the first device responsive to the using.

1 6. The method of claim 5, wherein the H.323 system includes a back end server, and  
2 the using the third device to support at least one of a registration request, an admission  
3 request, and a status request associated with the H.323 call further comprises generating an  
4 accounting message for the H.323 call to the back end server.

1 7. The method of claim 4, wherein the H.323 system includes a third device, and  
2 wherein the second device has an Internet protocol (IP) address, and the method further  
3 comprising assigning the third device the IP address of the second device after the failure  
4 in the second device.

1 8. The method of claim 4, wherein billing information associated with the H.323 call  
2 is maintained after the failure in the second device.

1 9. The method of claim 1, wherein the first H.323 port has a first Internet protocol  
2 (IP) address, and wherein a terminal is coupled in communication with the first device,  
3 and the terminal using the first device as an H.323 gateway for the H.323 call, and the  
4 terminal having a second IP address, and the method further comprising:

5 supporting a standard network address translation (NAT) protocol on the first

6 device;

7 receiving an H.323 packet from the terminal; and

8 translating the H.323 packet using the standard NAT protocol to include a source  
9 address of the first IP address.

1 10. The method of claim 9, further comprising:

2 supporting an H.323 proxy service on the first device;

3 receiving a second H.323 packet at the first H.323 port, the second packet

4 including a destination address of the first IP address, the second H.323 packet  
5 for the terminal; and

6 translating the second H.323 packet using the H.323 proxy server and the NAT  
7 protocol to include the destination address of the second IP address.

1 11. The method of claim 1, wherein the call state information includes at least one of a  
2 call state, a bandwidth authorized amount, a bandwidth in use amount, a ringing status, a  
3 call timer, a call start time, and a list of open logical channels.

1 12. An edge router comprising:

2 a first communication channel, the first communication channel capable of

3 coupling the edge router in communication with at least one H.323 device;

4 a second communication channel, the second communication channel capable of  
5 coupling the edge router in communication with a packet-based network, the  
6 packet-based network for generating requests and receiving responses to at  
7 least one of a registration request, an admission request, and a status request,  
8 the edge router having an Internet protocol (IP) address for use on the  
9 packet-based network;

10 a memory, the memory including a call state information, the call state information  
11 including information about H.323 calls placed by the at least one H.323  
12 device coupled in communication with the edge router; and

13 a processor, the processor for processing communications on said first channel and  
14 said second channel.

1 13. The edge router of claim 12, wherein the processor supports a standard network  
2 address translation (NAT) protocol and an H.323 proxy server, the processor capable of  
3 translating a packet received over the first communication channel and routing the packet  
4 onto the packet-based network after applying the NAT protocol and the H.323 proxy  
5 server, the processor capable of translating a packet received over the second  
6 communication channel and routing the packet to the H.323 device after applying the  
7 NAT protocol and the H.323 proxy server.

1 14. A gate controller comprising:  
2 a first communication channel, the first communication channel capable of  
3 coupling the gate controller in communication with a packet-based network,  
4 the packet-based network including a plurality of H.323 ports and a back end  
5 server;

6 a memory, the memory including a port status table and a cache, the port status  
7 table indicating the status of each of the plurality of H.323 ports;  
8 a processor, the processor supporting registration, admission and status functions  
9 for each of the plurality of H.323 ports, the processor capable of processing at  
10 least one of a registration request, an admission request, and a status request  
11 received over the first communication channel from an H.323 port in the  
12 plurality of H.323 ports.

1 15. The gate controller of claim 14, wherein the processor uses the cache to store the  
2 corresponding request, the processor capable of communicating over the first  
3 communication channel with a back end server to process the corresponding request, and  
4 the processor transmitting a response to the corresponding request after communicating  
5 with the back end server

1 16. A system comprising:  
2 a first device, the first device storing a first H.323 port and a memory, the memory  
3 having a call state information, the call state information including a call state  
4 for an H.323 call on the first H.323 port for a significant period of time;  
5 a second device, the second device for responding to at least one of a registration  
6 request, an admission request, and a status request for the first device.

1 17. A system comprising:  
2 a modified H.323 gateway, the modified H.323 gateway storing an H.323 port and  
3 a call state information corresponding to a state of a call on the H.323 port for a  
4 significant period of time; and

5 a modified H.323 gatekeeper, the modified H.323 gatekeeper not storing a call  
6 state information corresponding to a state of a call on the H.323 port for a  
7 significant period of time.

1 18. The system of claim 17, wherein the call has a duration, and the modified H.323  
2 gateway storing the H.323 port and the call state information corresponding to the state of  
3 the call on the H.323 port for the significant period of time comprises storing the call state  
4 information for the duration of the call.

1 19. The system of claim 17, wherein the modified H.323 gatekeeper supports  
2 responding to an admission request and the modified H.323 gatekeeper not storing the call  
3 state information corresponding to the state of the call on the H.323 port for the significant  
4 period of time comprises:

5 receiving the state information with the admission request; and  
6 not storing the state information after responding to the admission request.

1 20. An apparatus for supporting an H.323 call, the H.323 call placed using an H.323  
2 port on the apparatus, the apparatus comprising:

3 means for storing a call state information, the call state information about the  
4 H.323 call;  
5 means for generating an admission request for the H.323 call to a first device;  
6 means for receiving an admission confirmation for the H.323 call from the first  
7 device; and  
8 means for updating the call state information after receiving the admission  
9 confirmation.

1     21.     The apparatus of claim 20, further comprising means for supporting a standard  
2     network address translation protocol.

1     22.     The apparatus of claim 20, further comprising means for supporting an H.323  
2     proxy service.

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**Abstract**